

CAPSTONE PROJECT

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Business Problem

The aim of this project is to evaluate the location of a new Telepizza franchise in the city of Madrid in Spain. The city of Madrid is composed by 21 boroughs and the idea is to provide to the investor a properly location for opening the establishment. For this purpose, it is going to be analyse the 21 boroughs looking among other information, the ratio between inhabitants and number of existing franchises. The first step will be selecting one of the 21 boroughs and then continue the analysis to find the proper location inside the selected borough.

When an investor or stakeholder is deciding to open a franchise of any kind, the location of the establishment is one of the most important aspects. A right position can make the difference between a huge success or a big failure of the investment, so this data analysis project will focus on looking for the best position for opening the new Telepizza franchise

Data Section

The data that will be managed during this project will be mostly the one provided by Foursquare location data. Firstly, the 21 boroughs of Madrid and some of their properties such as number of residents will be obtained by scraping a Wikipedia webpage. After that, it will be added to the data frame the location of each one the boroughs using the geopy library and will be presented in a Madrid map using the Folium library. The next step is to use the Foursquare application to obtain the needed data. For each borough it will be searched the Telepizza establishments using the *search for a specific venue category* in Foursquare. The results will be analysed and the proper borough for the new establishment will be selected. After that, the analysis will focus on the position of the new establishment in the selected borough taking into account the distribution of existing Telepizza franchises.

For example, if after analysing the 21 boroughs we determine that Tetuan, which is one of the boroughs, has the proper conditions to establish there the Telepizza, the next step will be to evaluate the position of current Telepizza franchises in Tetuan to see where is the proper location to establish the new one.